

→ 12PS/TP  
to amend the specification  
as per examiner's comment.

# NON-PEPTIDE GLP-1 AGONISTS

## FIELD OF THE INVENTION

5 The present invention relates to novel non-peptide GLP-1 agonists, pharmaceutical compositions comprising them, use of the non-peptide GLP-1 agonists for the preparation of pharmaceutical compositions and methods for the treatment and/or prevention of disorders and diseases wherein an activation of the human GLP-1 receptor is beneficial, especially metabolic disorders such as IGT (impaired glucose tolerance), Type 1 diabetes, Type 2  
10 diabetes and obesity.

## BACKGROUND OF THE INVENTION

15 GLP-1 (glucagon like peptide-1) is a 30 amino acid long peptide hormone secreted by the L-cells in the intestine.

GLP-1 consists of two native forms, GLP-1 (7-36) and GLP-1 (7-37), of the following amino acid sequences:

20           7    8    9   10   11   12   13   14   15   16   17  
His-Ala-Glu-Gly-Thr-Phe-Thr-Ser-Asp-Val-Ser-

          18   19   20   21   22   23   24   25   26   27   28  
Ser-Tyr-Leu-Glu-Gly-Gln-Ala-Ala-Lys-Glu-Phe-

25           29   30   31   32   33   34   35   36  
Ile-Ala-Trp-Leu-Val-Lys-Gly-Arg-X

wherein X is NH<sub>2</sub> for GLP-1(7-36) and Gly for GLP-1(7-37).

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GLP-1 is a so-called incretin and its primary mechanisms of actions are to:

- Stimulate insulin secretion in a physiological and glucose-dependent manner
- Decrease glucagon secretion
- Inhibit gastric emptying